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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rudolf Johan Marie Vullers

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EXAMINER

STOCK JR, GORDON J

ART UNIT

PAPER NUMBER

2877

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,949	<b>Applicant(s)</b> VULLERS, RUDOLF JOHAN MARIE	
	<b>Examiner</b> GORDON J. STOCK JR	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25, 30, 31, 34, 35 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 26-29, 32, 33 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The Amendment received on October 10, 2008 has been entered into the record.

#### *Drawings*

2. The Drawing received on October 10, 2008 is accepted by the Examiner.

#### *Claim Objections*

3. **Claims 2 and 5** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, **claim 5** does not further **claim 1** which recites 'configured in the shape of an interrupted ring' because claim 5 states 'wherein the at least one detection element is substantially ring-shaped.' In addition, claim 5 should have 'element is a substantially ring-shaped' read -element is substantially ring-shaped-. And claim 2 does not further limit claim 1 for claim 1 states the following: wherein said at least one light-detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section' and claim 2 states 'wherein the at least one light-detection element is arranged adjacent said receiving section.' Corrections are required.
4. **Claim 11** is objected to for the following: '1 .mu.m' should read -1 micron-. Correction is required.
5. **Claim 13** is objected to for the following: '100 .mu.m' should read -100 microns-. Correction is required.

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6. **Claim 14** is objected to for the following: '1 .mu.m' should read -1 micron-. Correction is required.
7. **Claim 17** is objected to for the following: '100 .mu.m' should read -100 microns-. Correction is required.
8. **Claim 18** is objected to for the following: '1 .mu.m' should read -1 micron-. Correction is required.
9. **Claim 19** is objected to for the following: '10,000 .mu.m.sup.3' should read -10,000 cubic microns-. Correction is required.
10. **Claim 25** is objected to for the following: 'is arranged to provide' should read -is arranged to function as-. Correction is required.

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. **Claims 8-11, 24 and 25** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In regards to **claim 8**, **claim 8** states 'wherein said receiving plane is provided with at least two spaced apart light-detection elements' which is described in applicant's disclosure (see Fig. 3). However, **claim 8** depends from **claim 1** wherein **claim 1** recites 'configured in the shape of an interrupted ring' which only is disclosed in embodiments

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of Figs. 1 and 2. There is no description of an embodiment comprising both a ring and 'at least two spaced apart light-detection elements' in applicant's disclosure. In regards to claim 24, 'wherein the at least one detection element extends at least partially within said receiving section' this is only disclosed in the Fig. 3 embodiment. **Claim 24** depends from **claim 1** which recites 'configured in the shape of an interrupted ring' which only is disclosed in embodiments of Figs. 1 and 2. There is no description of an embodiment comprising both a ring and 'wherein the at least one detection element extends at least partially within said receiving section' in applicant's disclosure. **Claims 9-11 and 25** are rejected for depending from rejected base claims.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. **Claims 1, 2, 4-8, 20, 22, 24, 37** are rejected under 35 U.S.C. 102(e) as being anticipated by **Kuwahara et al. (6,542,455)—cited by applicant.**

As for **claims 1, 2, 4-8, 20, 22, 24, 37**, Kuwahara discloses the following:

Optical element, provided with a receiving plane (10) comprising a receiving section (11) for receiving at least one light beam (2), wherein the receiving plane (10) is provided with at least one light-detection element (3) being arranged to detect whether at least part of said light

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beam is projected thereon. (**claim 1**)(Fig 2a: 2; col. 3, lines 55-60); wherein said at least one light-detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section (**claim 1**)(Fig. 2a: demonstrates a ring with regards to 2 and appears interrupted by 14 and 15, and Fig. 5 demonstrates an interrupted ring in relation to 2: ring interrupted by separation between quadrants when viewed against Fig. 2a); wherein the at least one detection element is arranged adjacent said receiving section (**claim 2**)(Fig. 2a: 10, 12, 2; Fig. 5: array of four 10, 12 quadrants); wherein the at least one light-detection element substantially surrounds at least part of said light receiving section of the receiving plane (**claim 4**)(Fig. 2a: 10, 12, 2; Fig. 5: 10, 12 quadrants surround 2); wherein the at least one detection element is substantially ring-shaped (**claim 5**)(Fig. 2a: 10, 12; Fig. 5: four quadrants surrounding 2); wherein said light receiving section, which is at least partially surrounded by said detection element, is only slightly larger than the cross section of said light beam viewed in said receiving plane (**claim 6**)(Fig. 2b: 10, 12, 2, 20); wherein said at least one detection element is arranged symmetrically with respect to said light receiving section (**claim 7**) (Fig. 2a: 10 and 12 are concentric to 2; Fig. 3: 10, 12 are symmetric with respect to a line parallel to 24 and 25 and intersecting 2; Fig. 5: four quadrants symmetric to axis passing through 2 and out of page); wherein said receiving plane is provided with at least two spaced apart light-detection elements (**claim 8**)(Fig. 6: plurality of circumferential interrupted ring shaped detectors: 10, 12, 14, 15, 2); wherein the at least one light detection element comprises at least one electrically conductive material (**claim 20**) (Fig. 2b: 23; Fig. 5: 15); wherein the optical element comprises electrical connections which are connected to the at least one light-detection element to connect said detection element to a

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measurement device (**claim 22**)(Fig. 7: 23, 22 and demonstrates that position is measured for signals from the detector is used in position control; Fig. 5: col. 4, lines 64-67; col. 5, lines 1-35); wherein the at least one detection element extends at least partially within said receiving section (**claim 24**) (Fig. 2b: 10 extends on both sides of 2); an optical device for recording comprising the optical element of **claim 1 (claim 37)** (see **claim 1** above with col. 3, lines 26-41).

15. **Claims 1, 2, 5, 6, 7, 20, 22-23** are rejected under 35 U.S.C. 102(b) as being anticipated by **Stone et al. (3,688,584)**.

As for **claims 1, 2, 5, 6, 7, 20, and 22-23**, Stone discloses the following: an optical element providing with a receiving plane comprising a light receiving section wherein the receiving plane is provided with at least one light-detection element being arranged to detect whether at least part of said light beam is projected thereon, wherein said at least one light detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section (**claims 1, 2, 5**)(Fig. 9: 84-88 and 17); wherein said light-receiving section which is at least partially surrounded by said detection element is only slightly larger than the cross-section of said light beam viewed in said receiving plane (**claim 6**)(Fig. 9: 84-88 versus 17); wherein said at least one detection element is arranged symmetrically with respect to said light-receiving section (**claim 7**)(Fig. 9: 85-88 symmetric with respect to axis running vertically and horizontally through 17 and with respect with axis running through 17 and out of the paper); and suggests that the at least one light detection element comprises at least one electrically conductive material (**claim 20**)(col. 8, lines 25-37); wherein the optical element comprises electrical connections which are connected to the at least one light-detection element to connect said detection element

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to a measurement device (**claim 22**)(col. 8, lines 25-37; Fig. 8: 66-69); wherein different parts of each light detection element are arranged to be connected to an electrical measurement device (**claim 23**)(col. 8, lines 25-37; Fig. 8: 66-69).

16. **Claims 1-7, 12, 20, 22, 23, 30, 31, 34, 35, 38** are rejected under 35 U.S.C. 102(b) as being anticipated by **Kasner et al. (4,793,715)**.

As for **claims 1-7, 12, 20, 22, 23, 30, 31, 34, 35, and 38**, Kasner discloses the following: an optical element provided with a receiving plane comprising a light receiving section wherein the receiving plane is provided with at least one light detection element being arranged to detect whether at least part of said light beam is projected thereon, wherein said at least one light detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section (**claim 1**)(Fig. 3: 40 ring like detector comprising four thermal sensitive devices: 26 and 12 with aperture: 42); wherein the at least one detection element is arranged adjacent said receiving section (**claim 2**) (Fig. 3: 12 adjacent to 42); wherein the at least one detection element comprises material whose electric resistance changes when light of said light beam is projected thereon, wherein said detection element is arranged to be connected to an electrical measurement device (**claim 3**)(col. 3, lines 25-37; col. 3, lines 55-65; col. 4, lines 18-38); wherein the at least one light-detection element substantially surrounds at least part of said light receiving section of the receiving plane (**claim 4**)(Fig. 3: quadrants surround 42); wherein the at least one detection element is a substantially ring-shaped (**claim 5**)(Fig. 3: four quadrants surrounding 42 in a ring shape); wherein said light receiving section which is at least partially surrounded by said detection element is only slightly larger than the cross section of said light beam viewed in said



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receiving plane (**claim 6**) (Fig. 3: radius Rb along A axis demonstrates cross section of the laser beam is slightly smaller than aperture: 42); wherein said at least one detection element is arranged symmetrically with respect to said light receiving section (**claim 7**) (Fig. 3: quadrants symmetric with respect to axis A passing through aperture: 42); wherein the optical element has been provided with the at least one light-detection element using at least one thin layer deposition technique (**claim 12**) (suggested: col. 5, lines 3-15 with col. 9, lines 35-50); wherein the optical element comprises electrical connections which are connected to the at least one detection element to connect said detection element to a measurement device (**claim 22**) (col. 3, lines 25-37; col. 3, lines 55-65; col. 4, lines 18-38); wherein different parts of each light detection element are arranged to be connected to an electrical measurement device (**claim 23**) (col. 3, lines 25-37; col. 3, lines 55-65; col. 4, lines 18-38); method of manufacturing an optical element wherein an optical element substrate is provided with at least one detection element (**claim 30**) (Fig. 3: 15, 16, 12) using at least one thin layer deposition technique (**claim 30**) (suggested: col. 5, lines 3-15 with col. 9, lines 35-50) wherein said at least one light detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section (**claim 30**) (Fig. 3: 40 ring like detector comprising four thermal sensitive devices: 26 and 12 with aperture: 42); method of aligning at least one light beam and an optical element as in claim 1, the optical element provided with a receiving plane comprising a light receiving section wherein the receiving plane is provided with at least one light detection element being arranged to detect whether at least part of said light beam is projected thereon, wherein said at least one light detection element configured in the shape of an interrupted ring substantially surrounding the

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light receiving section within said receiving plane and arranged adjacent said light receiving section (**claim 31**)(Fig. 3: 40 ring like detector comprising four thermal sensitive devices: 26 and 12 with aperture: 42; col. 4, lines 17-22); wherein the light beam is projected onto said optical element such that the optical element receives the light beam in said receiving plane wherein said at least one light detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section is used to align the optical element and the light beam such that the optical element substantially receives the light beam in the receiving section of the receiving plane (**claim 31**) (Fig. 3: 40 ring like detector comprising four thermal sensitive devices: 26 and 12 with aperture: 42; col. 4, lines 17-22; Fig. 3: beam with axis A substantially passes through aperture 42 when properly aligned); characterized that the at least one light beam and the optical element are aligned on an optical axis (**claim 34**) (Fig. 3: 40 with A); wherein said use of the at least one detection element comprises measuring its resistance to detect whether at least part of the light beam is projected thereon (**claim 35**) (col. 3, lines 25-37; col. 3, lines 55-65; col. 4, lines 18-38); wherein the at least electrically conductive material is a metal (**claim 38**) (col. 4, lines 55-60).

Also in regards to ‘using at least one thin layer technique’ of **claim 12** even though product-by-process claims are limited by and defined by a process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F. 2d 695,698, 227 USPQ 964,966 (Fed. Cir. 1985).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 3 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kuwahara et al. (6,542,455)—cited by applicant** in view of **King (4,524,282)-previously cited** and **Corbett et al. (4,325,145)-previously cited**.

As for **claims 3 and 23**, Kuwahara discloses everything as above (see **claim 1**). In addition, he demonstrates that different parts of each light detection element are arranged to be connected to an electrical measurement device (col. 4, lines 48-67; col. 5, lines 1-5). He does not explicitly state that the detection elements comprises material whose electrical resistance changes when light of said light beam is projected thereon. However, King discloses that a change in resistance is used to determine the levelness relative to a laser beam (col. 1, lines 20-50) and Corbett teaches that laser energy may be detected with thermocouples via a measurement of temperature dependent change in resistance (col. 1, lines 5-20). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the detection element comprise a material whose electrical resistance changes in order to the detect the light projected on it.

19. **Claims 12, 30, 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kuwahara et al. (6,542,455)—cited by applicant** in view of **LaBaw (3,678,283)-previously cited**.

As for **claims 12 and 30**, Kuwahara discloses everything as above (see **claim 1**). In addition, he discloses at least one light detection element is provided on a substrate (Fig. 2a: 10, 12 on 8). And discloses the following: 'wherein said at least one light-detection element configured in the shape of an interrupted ring substantially surrounding the light receiving section within said receiving plane and arranged adjacent said light receiving section (Fig. 2a: demonstrates a ring with regards to 2 and appears interrupted by 14 and 15, and Fig. 5 demonstrates an interrupted ring in relation to 2: ring interrupted by separation between quadrants when viewed against Fig. 2a); wherein the at least one detection element is arranged adjacent said receiving section (Fig. 2a: 10, 12, 2; Fig. 5: array of four 10, 12 quadrants)' As for the light detection element is provided using a thin layer deposition technique, Kuwahara is silent though he mentions the use of semiconductor processes (col. 5, lines 60-65). However, LaBaw in a radiation sensitive optical tracker teaches that photodetectors are made via thin layer deposition (col. 2, lines 10-15). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use thin layer deposition in order to create the photodetection element on the substrate.

Also in regards to 'using at least one thin layer technique' of **claim 12** even though product-by-process claims are limited by and defined by a process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F. 2d 695,698, 227 USPQ 964,966 (Fed. Cir. 1985).

As for **claim 39**, Kuwahara in view of LaBaw discloses everything as above (see **claim 12**). They are silent concerning a CVD process though Kuwahara mentions the use of semiconductor manufacturing processes to produce the detector (col. 5, lines 60-65). Examiner takes official notice that CVD is a well known manufacturing process in the semiconductor technology. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use a CVD process in order to produce the detection element.

20. **Claims 13-19 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kuwahara et al. (6,542,455)—cited by applicant**.

As for **claims 13-19**, Kuwahara discloses everything as above (see **claim 1**). As for the particular dimensions for the at least one detection element, Kuwahara does not specifically state a thickness of 100 nm or less or width smaller than 1 micron or a volume less than 10,000 cubic microns. He does mention that the thickness is related to the wavelength being used (col. 4, lines 1-10). Nevertheless, these dimensions relate to the size of the detection element. It would have been an obvious matter of design choice to have the thickness of nm or less, width smaller than 1 micron, or a volume less than 10,000 cubic microns since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

As for **claim 38**, Kuwahara discloses everything as above (see **claim 20**). He is silent concerning the material being a metal. He does mention that there is wiring (Fig. 2b: 23; Fig. 5: 15). Examiner takes official notice that copper is well known as a metal used in wiring. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was

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made that the conductive material was a metal such as copper in order to conduct the electrical signal through the detector circuit.

21. **Claim 38** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Stone et al. (3,688,584)**.

As for **claim 38**, Stone discloses everything as above (see **claim 20**). He is silent concerning the material being a metal. He does mention electrical connections (col. 8, lines 25-37; Fig. 8: 66-69). Examiner takes official notice that copper is well known as a metal used in wiring. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made that the conductive material was a metal such as copper in order to conduct the electrical signal through the detector circuit.

22. **Claims 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasner et al. (4,793,715)**.

As for **claims 13-15**, Kasner discloses everything as above (see **claim 1**). As for the particular thicknesses for the at least one detection element, Kuwahara does not specifically state a thickness of 100 nm or less. He does mention a thickness (col. 9, lines 35-50). Nevertheless, relates to the size of the detection element. It would have been an obvious matter of design choice to have the thickness of nm or less since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

23. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasner et al. (4,793,715)** in view of **Yagi et al. (4,914,671)**.

As for **claim 21**, Kasner discloses everything as above (see **claim 1**). He does not explicitly mention a thermocouple. Nevertheless, Yagi in a laser adjustment system teaches the use of a thermocouple (Fig. 2: 73). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the at least one detection element comprise a thermocouple in order to detect if a laser needs realignment.

***Allowable Subject Matter***

24. **Claims 26-29, 32, 33, and 36** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to **claims 25-29**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in an optical element ' wherein the optical element comprises a lens,' 'wherein the optical element comprises an optical filter,' 'wherein the optical element comprises an optical grating,' and 'wherein the optical element comprises a mirror' respectively, in combination with the rest of the limitations of **claims 26-29**.

As to **claim 32**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method of aligning at least one light beam and optical element according to claim 1 'wherein the light beam and the optical element are moved from a first relative position in which the light beam is detected by the at least one light-detecting element, to a second relative position in which the light beam is substantially not detected by said detecting element', in combination with the rest of the limitations of **claims 32-33**.

As to **claim 36**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method of aligning at least one light beam and optical element according to

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claim 1 'wherein, when a certain temperature rise of the at least one detection element is detected, the light beam and the optical element are moved with respect to each other such that the temperature of said detection element falls,' in combination with the rest of the limitations of **claim 36**.

### ***Response to Arguments***

25. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent 3,689,772 to Nicholas George et al.; U.S. Patent 4,131,793 to Stoutmeyer et al; U.S. Patent 4,760,436 to Yi Zi; U.S. Patent 5,319,188 to Cole; and U.S. Patent 6,606,157 to Kaye et al.

27. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a



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demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made.

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Fax/Telephone Numbers***

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Art Unit: 2877

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: **(571) 273-8300***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/G. J. S./

Examiner, Art Unit 2877

/Gregory J. Toatley, Jr./

Supervisory Patent Examiner, Art Unit 2877

1/23/2009